Safety Advisory Committee
January 10, 2014
1:30 – 3:00 PM

Minutes

Committee Member	Representing	Present
D. Estrada, V. Potapenko, M. O. Leimer	Human Resources Advisors	X
Blodgett, Paul M.	Environment, Health and Safety Division	X
Bluhm, Hendrik	Chemical Sciences Division	X
Buonsanti, Raffaella	Materials Sciences Division	
Christensen, John N.	Earth Sciences Division	X
Dardin, Steve	Physics Division	
Franaszek, Stephen	Genomics Division	
Fujikawa, Brian	Nuclear Science Division	
Giuntoli, Patricia	Computing Sciences Directorate	
vacant	Environmental Energy Technologies Division	
Martin, Michael C.	Advanced Light Source Division	X
Sauter, Nicholas	Physical Biosciences Division	X
Seidl, Peter	Accelerator & Fusion Research Division; SAC Chair	X
Taylor, Scott E.	Life Sciences Division	X
Tomaselli, Ann	Information Technology Division	X
Tucker, Eugene	Facilities Division	X
Thomas, Patricia M.	Safety Advisory Committee Secretary	X
Wong, Weyland	Engineering Division	X

Others Present: James Basore, John Chernowski, Laurel Davis, John Elliott, Jim Floyd, Michelle Flynn, Howard Hatayama, Marcus Hertlein, Mike Kritscher, Glenn Kubiak, Peter Lichty, Betsy MacGowan, Jack Salazar, Bill Wells, Marty White, Mike Wisherop

Comments from the Chair – Peter Seidl

- **New Human Resources representatives –** Vera Potapenko, Dominga Estrada, and Marcia Ocon Leimer will be alternating the responsibilities for representing Human Resources and advising SAC on the interaction between HR and safety policies.
- **Subcommittees –** Several subcommittees are being organized to work on recently discussed policy issues. If you would like to participate in any of these efforts, please contact Peter Seidl. The **On-the-Job Training** subcommittee is being organized by James Basore and Weyland Wong. The **Safety Walkaround** subcommittee is being organized by Bill Wells and Eugene Tucker. The **Defibrillator Policy** subcommittee is being organized by Peter Lichty and Hendrik Bluhm.

- **Safety Walkaround Homework Assignment –** Peter Seidl asked committee members to poll their Division Director and key personnel before the next meeting to find out what kind of safety walkaround programs the Divisions have now, what results the Divisions would like to achieve from safety walkarounds, and what kind of policies they want.

- **Next SAC meeting with Lab Director –** It has been over a year since the last SAC meeting with the Lab Director. Peter Seidl suggests that the next meeting be scheduled after the committee receives feedback from the Division Directors about the Peer Review process and the Work Planning and Control Beta Test. One of the issues SAC was asked to tackle at the last meeting with the Lab Director was the Accident/Incident Investigation process. SAC secretary Pat Thomas asked for Howard Hatayama's feedback on the status of this issue. Howard Hatayama reported that the engagement of Line Managers in the investigation process has been improved through just-in-time training and on-going quality assurance feedback and input throughout the process, so there are no surprises at the end. This has helped to reduce the cycle time of completing investigations. The Root Cause analysts provide their results to the Line Managers, who develop the Corrective Actions and accept ownership of them. The investigative principles developed by SAC have been implemented by LBNL investigation teams; however, the principles need to be promulgated to subcontractors working on LBNL projects. A recent construction project accident resulted in the subcontractor deciding to release several people.

Fume Hood Watch Program – John Elliott and Laurel Davis

Sustainability Manager John Elliott continued his discussion from last month of the Fume Hood Watch Program. The goal of the program is to create the behavior change of closing fume hood sashes when the hoods are not in use. The program applies to variable air volume hoods – not biosafety cabinets or laminar flow benches – and some constant air volume hoods. There are about 300 units that would be included. Lowering hood sashes reduces energy use by reducing the air volume needed to maintain face velocity and reducing the need to heat or cool outside air. Sashes can also increase safety every day, and especially during earthquakes or fires, by containing explosions and spills and reducing air flow to flammable materials. Typically, laboratory spaces consume about 5 times as much energy as offices, due mostly to fume hoods. Closing a fume hood is the most effective step an individual researcher can take in reducing greenhouse gasses – equivalent in savings to giving up driving for a year, or taking one family residence off the grid.

The Fume Hood Watch Program will work through eco-advocates in each building / area. The role of the eco-advocate is critical, since they can adapt program details to the particular conditions of their lab and lab group. The pilot program will be launched in one or two buildings this spring. There will be communications to researchers and "close me" stickers on hoods. John Elliott and Laurel Davis will follow up to verify implementation and provide updates to SAC.

A discussion of the proposed program followed:

- Scott Taylor asked whether closing the sashes would affect the air exchange rate in the laboratories. Some ethanol work takes place on benchtops because there are not enough hoods. Paul Blodgett and Laurel Davis responded that typically, a minimum of 6 air changes per hour needs to be maintained, and closing the hood sashes is not expected to reduce the air exchange below the required levels. Room pressure systems control the volume of fresh air.
- Follow up on the question raised above, there are concerns about the proper operation of laboratory ventilation systems – in some labs with old/defective ventilation systems, achieving six air exchanges/hour without the help of fume hoods with open sashes may not be possible. John Christensen commented that some hoods that were intended to be variable volume systems have been changed to constant volume, because they did not work properly. The existing infrastructure needs to be evaluated – there is leaky ductwork in Bldg. 70A. Glenn Kubiak asked committee members to report deferred maintenance issues that affect energy use to John Elliott. It would be good to establish a way to verify (initially and over time) proper ventilation system operation as part of the program.
- Marty White suggest that it would be good to establish a baseline so that program progress and energy savings can be tracked and reported over time.

Defibrillator Policy – Peter Lichty

Over the past decade, the level of interest in having defibrillators (AEDs) on site has varied within the Lab community. Dr. Lichty is requesting SAC's assistance in building a consensus on AED policy. A 2004 study of AED effectiveness, demographics, and our Lab geography judged the current distribution to be sufficient. There have been about three heart attack incidents at LBNL in the last 14 years. The highest risk of cardiac arrest in public places is actually in airports. UC police and the Fire Department paramedics have AEDs. The response time could be longer at off-site locations, such as JBEI. Both Stanford Linear Accelerator and Livermore Lab have AEDs, while Sandia relies on trained Security personnel. The devices are very safe to use, but they sometimes fail to function and need to be checked monthly. People who use the defibrillators

require training and must be placed on the bloodborne pathogens program. It could be difficult to maintain the program at LBNL because of personnel turnover.

Peter Lichty and Peter Seidl asked for volunteers to form a subcommittee. It would be helpful to have representation from various LBNL geographic areas and especially people with a biosciences or public health background.

EHS Document Management Pipeline – Mike Wisherop

Mike Wisherop presented an update of document changes EHS has recently completed or is currently developing. There have only been a few changes since last month:

- Medical exams – Exams are being offered to animal researchers and nanoworkers. There has been a higher acceptance rate (30-40%) than anticipated, so there is a backlog on nanoworker exams;
- Hazards Analysis – The draft policy will be posted in about a week.

Hazards Analysis and Work Planning – Bill Wells

Bill Wells is following up on an action item identified in July 2012 to update the Requirements and Procedures Manual section on work planning and authorizations. There are no actual changes to policy or requirements. The goal is to better explain the process and provide links to relevant information to make the RPM easier to use. Hazards Analysis is an important part of the process that was not previously mentioned in the RPM. Specific pointers are being provided to facility-based work authorizations, Activity Hazards Documents, and construction safety work authorizations.

Work Planning and Control – Michelle Flynn

Leadership Briefings are being conducted with all Division Directors, Associate Laboratory Directors, and the Lab Director to present an overview of the program, demonstrate the features of the new database, discuss the timeline, and plan the Beta test. The overall schedule is:

- January – March 2014 Beta test
- April – September 2014 Soft launch
- October 2014 and ongoing Implementation

Michelle Flynn is asking SAC members to participate in the Beta test and/or identify other people in their Divisions to participate. It would be particularly valuable to test the system with groups having multiple work authorizations. The time commitment for participants is expected to be about 4 hours, to attend training, use the database, and provide feedback. EHS Liaisons will provide assistance. Information entered into the database during the test will remain in the database when the new system goes live later in the year.

The schedule for the Beta test is:

- January 31 complete the Beta test plan
- February 7 present plan at SAC meeting
- February 18-28 Division planning
- February 19-March 31 Conduct Beta test

The Work Planning and Control database will not be ready to serve as a replacement for existing work authorizations, such as Activity Hazards Documents, until at least July 2014. Paul Blodgett plans to re-activate the Biosafety Work Authorization subcommittee to look at how to integrate work authorizations with the new process.

Technical Area Designation Policy – Michelle Flynn

The development of the policy started with a recommendation that LBNL develop a system for releasing authorization for people to work in non-resident spaces. In May 2011, Facilities began implementation of a temporary system. A SAC subcommittee was formed and revisited the issue to define the problem and safety needs. The result was a recommendation for a Technical Area Designation (TAD) process. Divisions will be required to identify areas that have hazards that could affect the health and safety of workers entering the areas to do work. Some low-hazard/non-technical areas have been included for TAD release because Divisions want to be notified before people come to work in them for reasons other than safety hazards. This hasn't been as much of a problem recently because Facilities work planning and scheduling have improved. Some Division Safety Coordinators have already been given access to the pilot Technical Area Designation database and have started adding information about contact people for technical areas. There will be a link to the database posted on the A-Z index.

There were questions about whether this database will replace the Hazards Management System, which also lists area hazards and contact people. The intent is that the databases will be complementary, but there is some duplication of information. The HMS is linked to Maximo, and some offsite facilities are not on Maximo. EHS plans to take a comprehensive look at all the hazards inventories.

Proposed February/March Agenda Items

- Ann Tomaselli asked for an update on the status of the Fire Protection Corrective Action Plan. Committee members would like to meet the new Fire Marshall.
- Feedback from Divisions on Safety Walkthroughs.
- Feedback from Division Directors (Engineering and/or Nuclear Science) on Peer Review process and status of recommended actions.
- EHS Pipeline update.
- Subcommittee updates on activities.

The meeting was adjourned at 3:00 PM
Respectfully submitted, Patricia M. Thomas, SAC Secretary